Serial No. 10/678,667
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Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (cancelled)

Claim 2 (currently amended): A method according to claim 19, wherein ~~in claim 1, characterized in that~~ on an ~~the~~ inlet side of the gap ~~(9)~~ the electrolyte flows against the guide means ~~(6)~~ in a ~~the~~ direction of the gap ~~(9)~~.

Claim 3 (currently amended): A method according to claim 19, further comprising the step of repeatedly changing a ~~as claimed in claim 1, characterized in that the~~ revolving direction of the guide means ~~(6)~~ and thus the conveying direction for the electrolyte through the gap ~~(9) is changed repeatedly~~.

Claim 4 (currently amended): A method according to claim 19, wherein ~~as claimed in claim 1, characterized in that~~ the work-piece ~~(3)~~ is held in a displaceable manner above the bath level in the direction of the axis of its cylindrical inside surface ~~(4)~~.

Claim 5 (withdrawn): An apparatus for performing the method for electroplating a cylindrical inside surface of a work-piece extending substantially over a semi-circle in accordance with claim 1 with a bath tank, with a fixing device for the work-piece and with a revolving guide means between which a gap for the conveyance of the electrolyte remains between guide means and the inside surface of the work-piece, characterized in that the guide mans immerses only partly into the bath (8) and is used as the conveyor for the electrolyte and that the fixing device (2) receives the work-piece (3) in a working position above the bath level.

Claim 6 (withdrawn): An apparatus as claimed in claim 5, characterized in that the revolving speed of the guide means (6) is adjustable.

Claim 7 (withdrawn): An apparatus as claimed in claim 5, characterized in that at least one nozzle (11) facing against the guide means (6) and the gap (9) for an electrolyte flow is provided on the inlet side of the gap (9) between the guide means (6) and the inside surface (4) of the work-piece (3).

Claim 8 (withdrawn): An apparatus as claimed in claim 5, characterized in that the fixing device (2) forms a sliding guide means (5) for the work-piece (3) in the direction of the revolving axis of the guide means (6).

Claim 9 (withdrawn): An apparatus as claimed in claim 5, characterized in that the guide means (6) has a profiled surface.

Claim 10 (withdrawn): An apparatus as claimed in claim 5, characterized in that the guide means (6) is arranged as a bipolar electrode between the work-piece (3) which is switched as a cathode and an anode (10) which is arranged in the bath (8).

Claim 11 (withdrawn): An apparatus as claimed in claim 1, characterized in that the guide means (6) is displaceable in the radial direction relative to the fixing device (2) for the work-piece (3).

Claim 12 (withdrawn): An apparatus as claimed in claim 1, characterized in that the guide means (6) consists of a rotor which is parallel to the axis of the inside surface (4) of the work-piece (3).

Claim 13 (withdrawn): An apparatus as claimed in claim 1, characterized in that the guide means (6) consists of a support for an electrolyte-permeable intermediate layer (20) which fills the gap (9) at least partly.

Claim 14 (withdrawn): An apparatus as claimed in claim 13, characterized in that the surface of the intermediate layer (20) consist of a fabric (21) resting on the inside surface (4) of the work-piece (3).

Claim 15 (withdrawn): An apparatus as claimed in claim 13, characterized in that the intermediate layer (20) consists of a brush trimming (22).

Claim 16 (withdrawn): An apparatus as claimed in claim 15, characterized in that the electrically conductive bristles of the brush trimming (22) end at a radial distance from the inside surface (4) of the work-piece.

Claim 17 (withdrawn): An apparatus as claimed in claim 15, characterized in that the bristles of the brush trimming (22) which rest on the inside surface (4) of the work-piece (3) consist of an electrically insulating material.

Claim 18 (withdrawn): An apparatus as claimed in claim 1, characterized in that the guide means (6) comprise radial pass-through openings (23) for the electrolyte.

Claim 19 (new): A method for electroplating a cylindrical inside surface of a work-piece extending substantially over a semi-circle by conveying an electrolyte from a bath in a circulation through a gap between the inside surface and a revolving guide means, the method comprising the steps of:

conveying the electrolyte outside of the bath in a circumferential direction through the gap between the guide means and the work-piece with the help of the guide means immersed only partly in the bath; and

electroplating the cylindrical inside surface of the work-piece.